

Platform Wound Device - Novel and Simplified Negative Pressure Wound Therapy Device Without a Filler Material

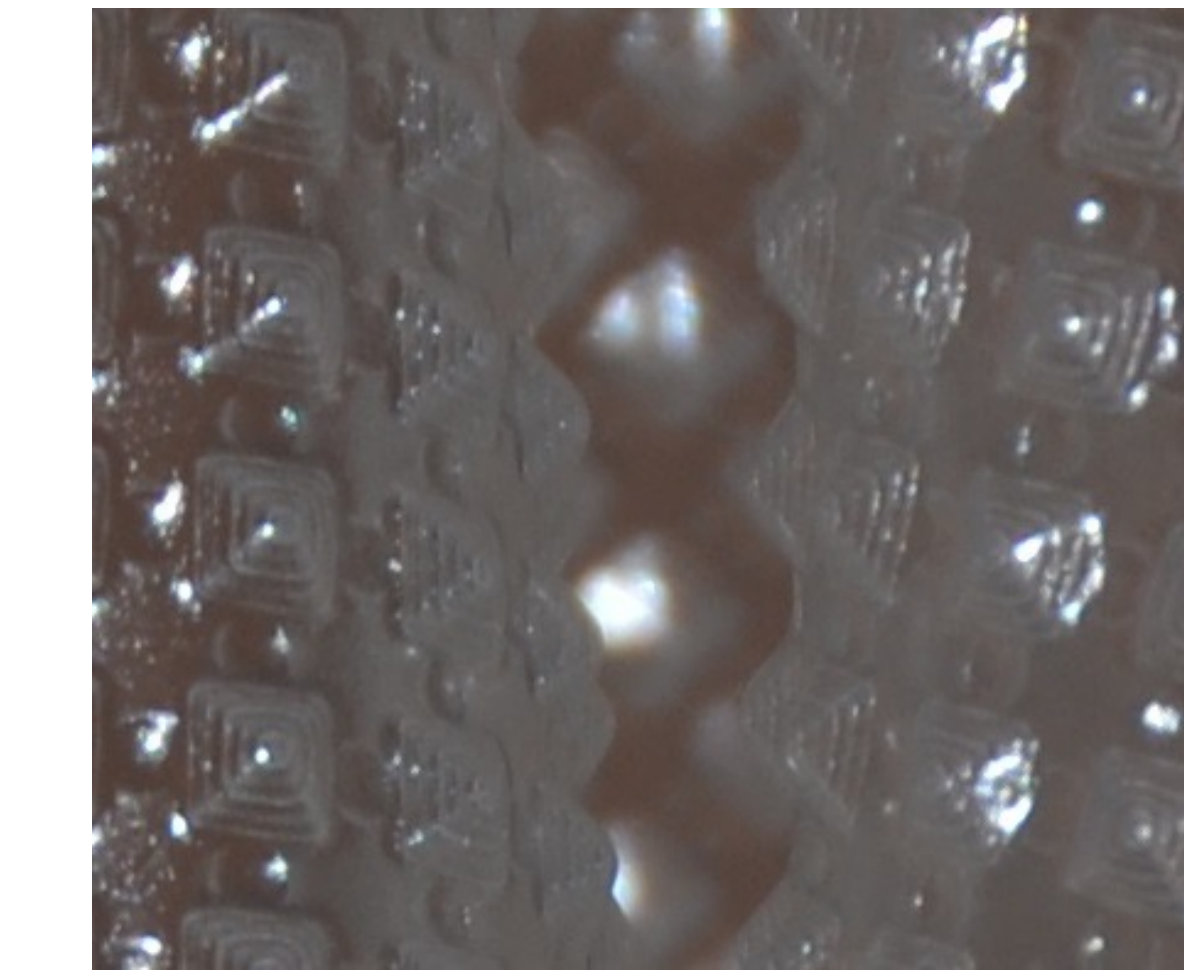
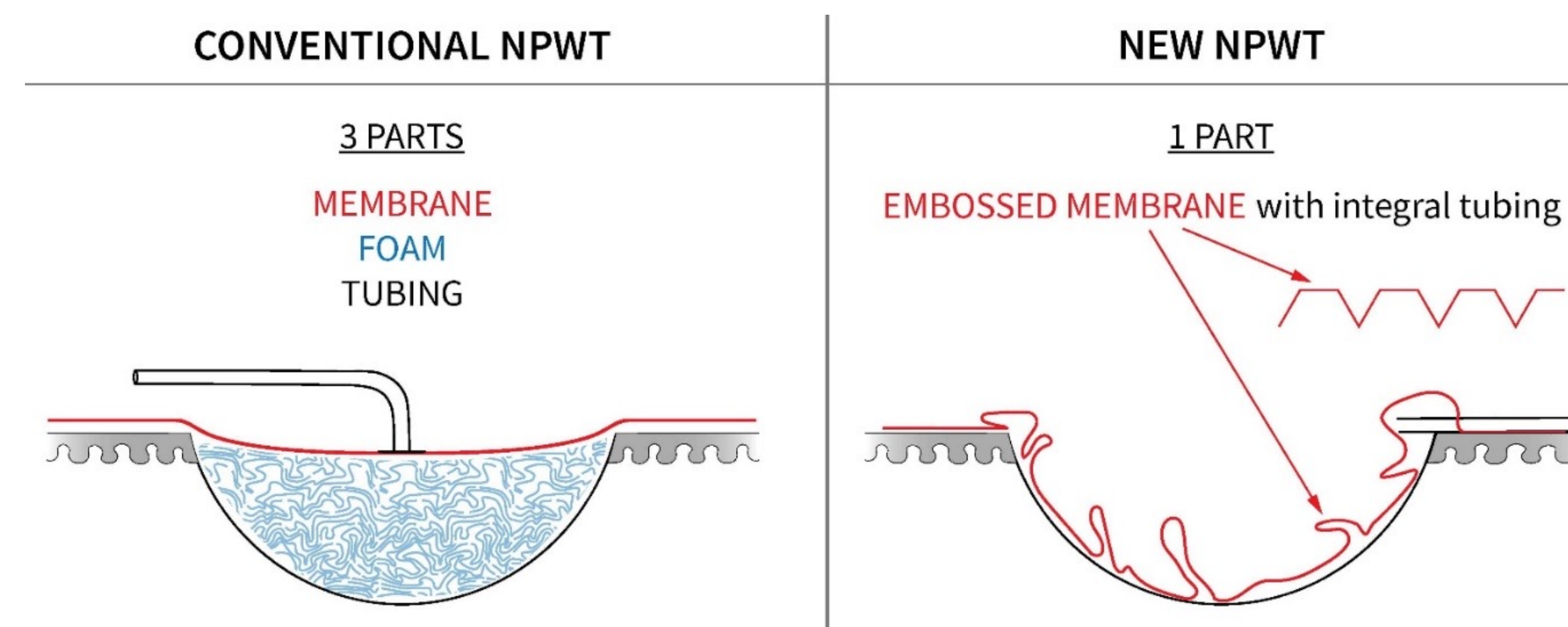
Kristo Nuutila¹, Victoria Diaz², Kristin Anselmo², Michael Broomhead³, Elof Eriksson³, Rodney Chan²

¹ United States Army Institute for Surgical Research, Ft. Sam Houston, TX; ²The Metis Foundation, San Antonio, TX; ³Applied Tissue Technologies, Hingham, MA

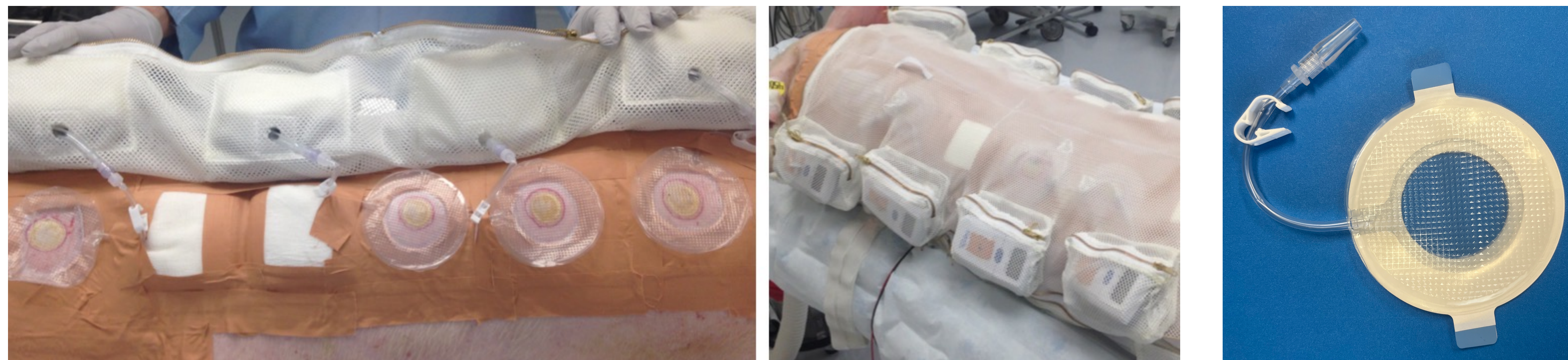
Introduction

- Conventional NPWT systems include a filler material usually foam or gauze at the wound/device interface.
- The filler material increases airflow and thus increases the required pump capacity that can cause patient discomfort or even ischemia in wounds with compromised vascularity.
- The filler may also fragment and become colonized with bacteria over time.
- To mitigate these, negative aspects, we have developed a new impermeable single layer component membrane dressing to deliver NPWT that does not need a filler to function.

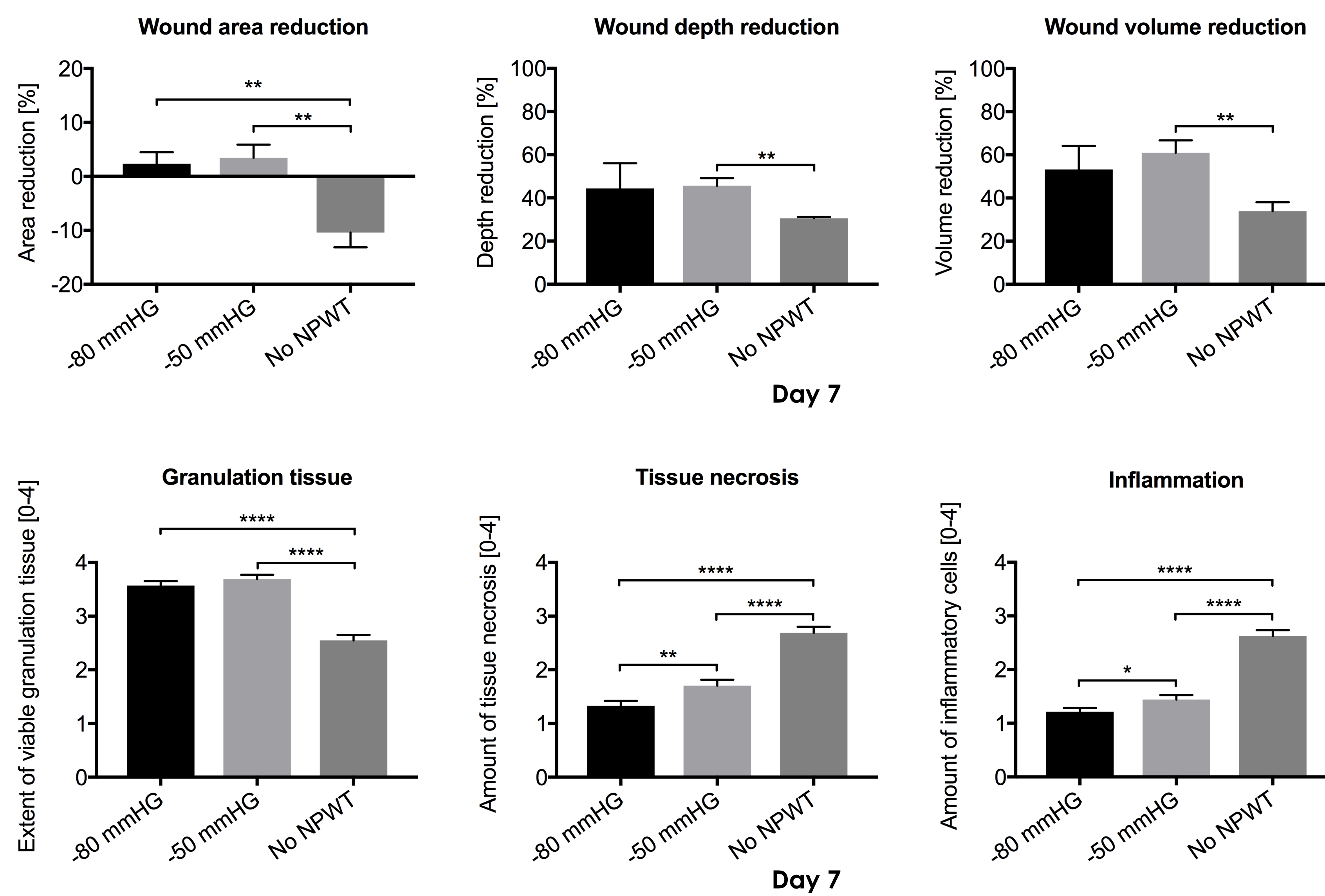
Negative Pressure - Platform Wound Device (NP-PWD)



Preclinical studies

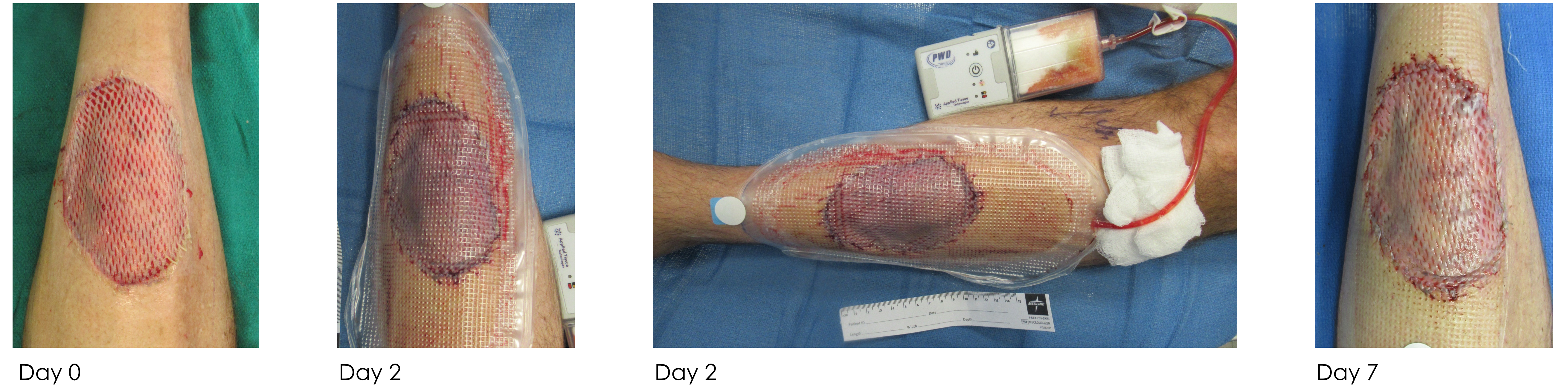


Operates effectively at a pressure as low as -50mmHg¹



Clinical cases

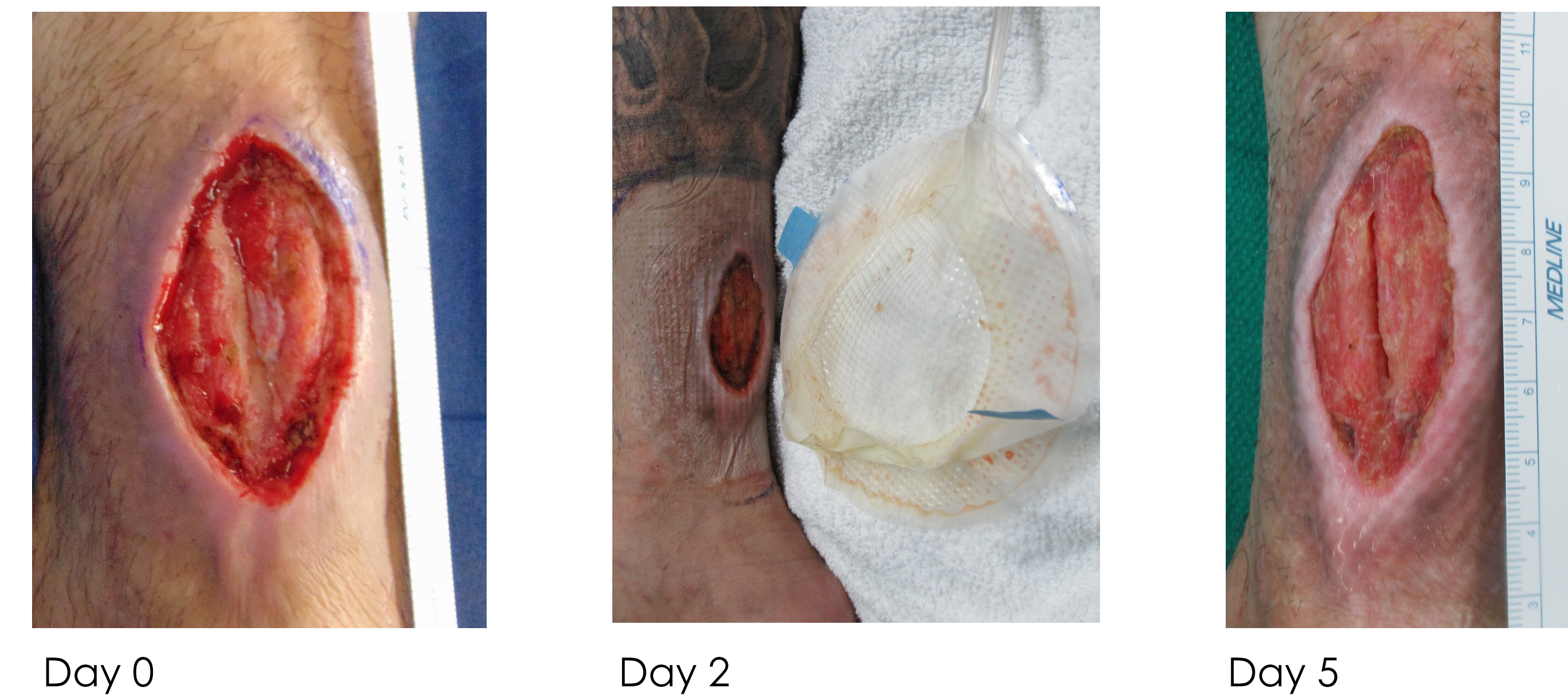
Grafted wounds



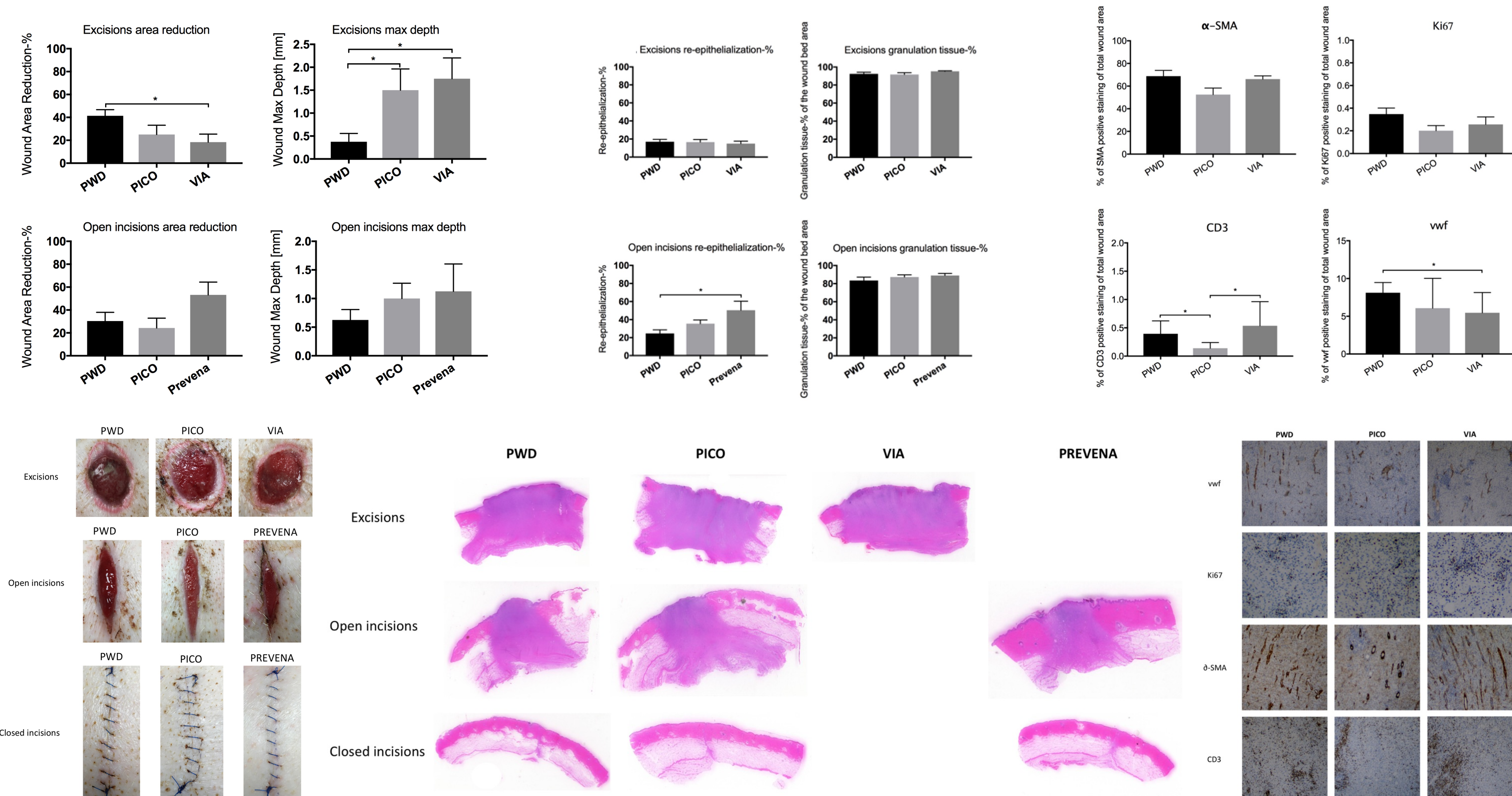
Infected lower leg wound



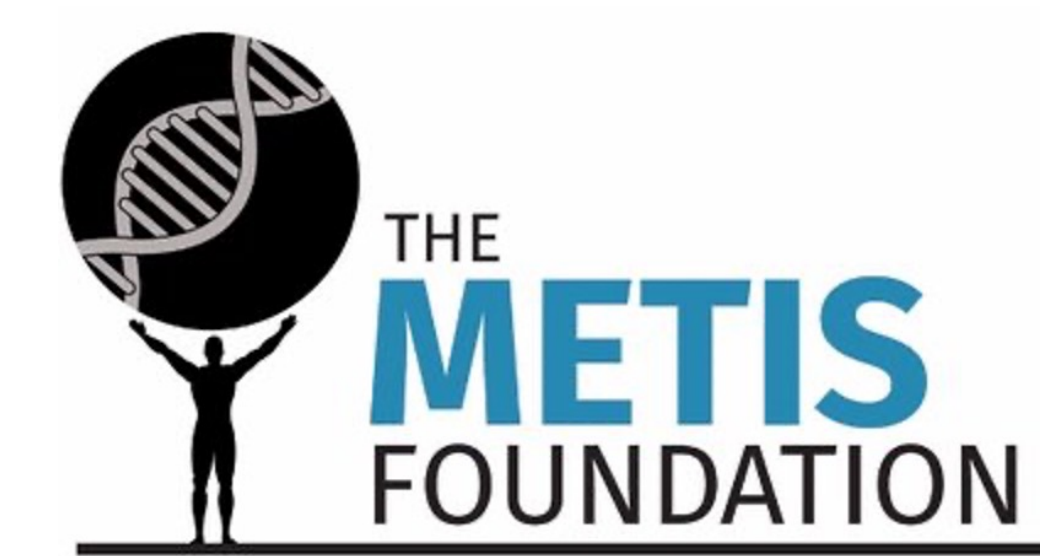
Right Achilles abscess



Performs similarly to conventional NPWT systems²



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Conclusions

- The PWD is a single component impermeable polyurethane dressing for NPWT
- The device employs an impermeable membrane that requires no foam/gauze thus drastically reducing pump capacity requirements, physical size, and time of application
- Preclinical large animal studies have shown that
 - The PWD operates effectively at a pressure as low as -50mmHg
 - No differences were found between the treatment systems with a filler or no filler
- Clinical case studies have shown that
 - The PWD is easy to apply and tolerable for patients
 - The transparency of the membrane allows for continuous assessment of the wound without having to remove the dressing

References
1. Nuutila K, Yang L, Broomhead M, Prooppe K, Eriksson E. Novel negative pressure wound therapy device without foam or gauze is effective at -50 mmHg. *Wound Repair Regen.* 2019; Mar;27(2):142-149. 2. Nuutila K, Broomhead M, Prooppe K, Eriksson E. Study Comparing Platform Wound Dressing, a Negative-Pressure Device without a Filler, with Three Conventional Negative-Pressure Wound Therapy Systems in the Treatment of Excisional and Incisional Wounds. *Plast Reconstr Surg.* 2021; Jan 1;147(1):76-86.